AGRICULTURE

FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION FOR
RECRUITMENT TO POSTS IN BPS-17 UNDER
THE FEDERAL GOVERNMENT, 2010

AGRICULTURE

Roll Number

TIME ALLOWED:	**(PART-I) 30 MINUTES**	**MAXIMUM MARKS:20**
	(PART-II) 2 HOURS & 30 MINUTES	**MAXIMUM MARKS:80**

NOTE: (i) **First** attempt **PART-I (MCQ)** on separate **Answer Sheet** which shall be taken back after **30 minutes.**
(ii) **Overwriting/cutting of the options/answers will not be given credit.**

PART – I (MCQ)
(COMPULSORY)

Q.1. Select the best option/answer and fill in the appropriate box on the Answer Sheet. (20)

(i) Wheat inflorescence is called as:
(a) Spike (b) Panicle (c) Spadix
(d) Cymose (e) None of these

(ii) Soil structure can be improved with the addition of:
(a) Chemical fertilizer (b) Gypsum (c) Lime
(d) Organic matter (e) None of these

(iii) Humidity is measured by means of:
(a) Luxmeter (b) Anemometer (c) Psychrometer
(d) Thermometer (e) None of these

(iv) When soil surface is protected/covered with residue of a crop, the practice is called?
(a) Sheet erosion (b) Nitrogen fixation (c) Tillage
(d) Mulching (e) None of these

(v) Which of the following is not a fruit?
(a) Tomato (b) Potato (c) Pumpkin
(d) Melon (e) None of these

(vi) Which one of the following is a good source of protein?
(a) Wheat (b) Maize (c) Pulses
(d) Meat (e) None of these

(vii) The vector of cotton leaf curl virus in Pakistan is considered as:
(a) Jassid (b) Aphid (c) Pink boll worm
(d) White fly (e) None of these

(viii) In genetics the appearance of an attribute of living organism is termed as:
(a) Dominant (b) Phenotype (c) Recessive
(d) Genotype (e) None of these

(ix) Rhizobium belongs to:
(a) Nitrogen fixing bacteria (b) Amonifying bacteria (c) Nitrifying bactyeria
(d) Denitrifying bacteria (e) None of these

(x) In DNA, adenine always pairs with:
(a) Guanine (b) Thymine (c) Uracil
(d) Cytosine (e) None of these

(xi) Insects have:
(a) 4 legs and 2 wings (b) 8 legs and 4 wing (c) 6 legs and 4 wings
(d) 4 legs and 4 wings (e) None of these

(xii) Tikka disease is major pathogenic threat in:
(a) Wheat (b) Apple (c) Sorghum
(d) Groundnut (e) None of these

(xiii) Food and Agriculture Organization (FAO) has its headquarters in:
(a) Washington (b) Geneva (c) Rome
(d) Paris (e) None of these

(xiv) Soil salinity can be rectified with:
(a) Urea (b) Ammonium Sulphate (c) Sodium Chloride
(d) Gypsum (e) None of these

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(xv) Safflower is an:
(a) Oil producing plant (b) Ornamental plant (c) Leguminous plant
(d) Fibre producing plant (e) None of these

(xvi) Banana fruit is classified in the category of:
(a) Berry (b) Pomes (c) Stone fruit
(d) Drupe (e) None of these

(xvii) Ploidy level of maize plant is:
(a) Monoploid (b) Diploid (c) Haploid
(d) Tetraploid (e) None of these

(xviii) Gypsum is rich source of:
(a) Calcium + Zinc (b) Calcium + Potassium (c) Calcium + Sulpher
(d) Calcium + Nitrogen (e) None of these

(xix) Gossypium hirsutum is the botanical name of:
(a) Rice (b) Maize (c) Sugarcane
(d) Cotton (e) None of these

(xx) Olericulture is the study dealing with:
(a) Honey bee (b) Rearing of silk worms (c) Vegetable production
(d) Growing ornamental flowers (e) None of the above

PART – II

NOTE:	**(i)** **PART-II** is to be attempted on the separate **Answer Book.** **(ii)** Attempt **ONLY FOUR** questions from **PART-II**. All questions carry **EQUAL** marks. **(iii)** Extra attempt of any question or any part of the attempted question will not be considered.

Q.2. Price control mechanism of some major agricultural commodities has failed in the country in the near past. Identify the main bottlenecks and suggest necessary measures to strengthen the existing marketing system. **(20)**

Q.3. Biotic stresses are the matter of great concern in agricultural crop production. Give a comprehensive approach of various pathways to protect the crops from these threats. **(20)**

Q.4. Discuss the causes of soil salinity and water logging in irrigated agriculture. Suggest appropriate recommendations to reclaim saline sodic soils. **(20)**

Q.5. Narrate the modern techniques of genetics regarding crop improvement. Discuss the prospects of new technologies to have the possibilities of another green revolution. **(20)**

Q.6. Agricultural research has significantly enhanced the productivity of all field crops in Pakistan except the oilseeds. Narrate the main shortfalls and discuss the role of various institutions/agencies working on these lines. **(20)**

Q.7. Write short notes on **ANY FOUR** of the following:. **(4 x 5)**
(a) Challenges in livestock management
(b) Genetic resources and their conservation
(c) Organic crop production
(d) Potential of horticulture sector as an industry
(e) Range management in Pakistan
(e) Foot and mouth disease

Q.8. Differentiate between the following (**ANY FOUR**): **(4 x 5)**
(a) Gram blight and Gram wilt
(b) C_3 and C_4 plants
(c) Biological nitrogen fixation and nitrification
(d) Silviculture and sericulture
(e) Respiration and transpiration
(f) Basic seed and certified seed

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